



Complete Summary

TITLE

Diabetes mellitus: percent of patients with blood pressure reading less than 130/80 in the last 12 months.

SOURCE(S)

HDC topics: diabetes. [internet]. Rockville (MD): Health Disparities Collaboratives; 2006 Jun 29[10 p.].

Measure Domain

PRIMARY MEASURE DOMAIN

Outcome

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percent of diabetic patients in the clinical information system with blood pressure reading less than 130/80 at last reading within the past 12 months.

The 130/80 cut-off changed from earlier years. UK Prospective Diabetes Study Group (UKPDS) [UKPDS, *BMJ*, 1998; Adler, et al., *BMJ*, 2000] and Hypertension Optimal Treatment (HOT) Trial [Hansson et al., *Lancet*, 1998] justify (lower the better) and American Diabetes Association (ADA) clinical guidelines were changed several years ago to reflect this. See also current guidelines [The treatment of hypertension in adult patients with diabetes (Technical Review), *Diabetes Care*, 2002; The treatment of hypertension in adult patients with diabetes (Position Statement), *Diabetes Care*, 2003; ADA, *Diabetes Care*, 2002; ADA, *Diabetes Care*, 2003].

Teams should strive to document blood pressure for at least 90% of their clinical information system patients.

RATIONALE

Diabetes is a complex, serious, and increasingly common disease. It is the most frequent cause of blindness among working-age adults; the leading cause of nontraumatic lower extremity amputation and end-stage renal disease; and a principal cause of congenital malformations, perinatal mortality, premature mortality, and disability. Persons with diabetes are at increased risk for stroke, ischemic heart disease, peripheral vascular disease, and neuropathy.

Diabetes is a costly disease—not only in terms of the economic burden it imposes on society, but also in terms of the human suffering imposed by the disease and its complications. Moreover, the burden of diabetes and its complications disproportionately affects minority populations and the elderly, and is likely to increase as minority populations grow and the U.S. population ages. Thus, diabetes poses an enormous public health challenge in America.

This measure is one of 18 measures that participants track in the HRSA Health Disparities Collaborative for Diabetes.

PRIMARY CLINICAL COMPONENT

Diabetes mellitus; blood pressure

DENOMINATOR DESCRIPTION

Total number of diabetic patients in the clinical information system with a documented blood pressure in the last 12 months

NUMERATOR DESCRIPTION

The number of patients from the denominator with a blood pressure reading less than 130/80 at the last reading within the past 12 months

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Unspecified

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Collaborative inter-organizational quality improvement
Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Ambulatory Care
Community Health Care
Managed Care Plans
Physician Group Practices/Clinics

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Advanced Practice Nurses
Physician Assistants
Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Group Clinical Practices

TARGET POPULATION AGE

Unspecified

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

15.7 million people have diabetes:

- 10.3 million diagnosed (= a sixfold increase over the past 40 years)
- 5.4 million undiagnosed
- 798,000 new cases diagnosed per year

EVIDENCE FOR INCIDENCE/PREVALENCE

Institute for Healthcare Improvement. Health Disparities Collaboratives changing practice, changing lives: diabetes training manual. Cambridge (MA): Institute for Healthcare Improvement; 2002. 74 p.

ASSOCIATION WITH VULNERABLE POPULATIONS

African Americans are 1.7 times more likely to have Type 2 diabetes than the general population. An estimated 2.3 million African Americans, or 10.8%, have diabetes. 25% of African Americans between the ages of 65 and 74 have diabetes, and one in four African American women over 55 has diabetes.

Latinos are almost twice as likely to have Type 2 diabetes. For example, diabetes affects 1.2 million or 10.6% of the Mexican American population.

Overall prevalence of Type 2 diabetes in Native Americans is 12.2%, compared to 5.2% of the general population. In some tribes, 50% of the population has diabetes.

EVIDENCE FOR ASSOCIATION WITH VULNERABLE POPULATIONS

Institute for Healthcare Improvement. Health Disparities Collaboratives changing practice, changing lives: diabetes training manual. Cambridge (MA): Institute for Healthcare Improvement; 2002. 74 p.

BURDEN OF ILLNESS

- Diabetes is the 7th leading cause of death in the U.S.
- Diabetes is the leading cause of new cases of blindness in adults ages 20 to 74 years.
- Diabetes is the leading cause of end-stage (chronic, irreversible) kidney disease.
- Diabetes is the leading cause of lower-extremity amputations not related to injury.
- People with diabetes are 2 to 4 times more likely to develop heart disease or stroke than people without diabetes.

EVIDENCE FOR BURDEN OF ILLNESS

Institute for Healthcare Improvement. Health Disparities Collaboratives changing practice, changing lives: diabetes training manual. Cambridge (MA): Institute for Healthcare Improvement; 2002. 74 p.

UTILIZATION

Unspecified

COSTS

Cost (United States, 1997):

- Total costs: \$98 billion
- Direct medical costs: \$44 billion
- Indirect costs: \$54 billion (disability, work loss, premature mortality)

EVIDENCE FOR COSTS

Institute for Healthcare Improvement. Health Disparities Collaboratives changing practice, changing lives: diabetes training manual. Cambridge (MA): Institute for Healthcare Improvement; 2002. 74 p.

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness
Equity

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Total number of diabetic patients in the clinical information system with a documented blood pressure in the last 12 months

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Total number of diabetic patients in the clinical information system with a documented blood pressure in the last 12 months

Exclusions

Unspecified

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition
Diagnostic Evaluation

DENOMINATOR TIME WINDOW

Time window is a fixed period of time

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

The number of patients from the denominator with a blood pressure reading less than 130/80 at the last reading within the past 12 months

Exclusions

Unspecified

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Encounter or point in time

DATA SOURCE

Registry data

LEVEL OF DETERMINATION OF QUALITY

Not Individual Case

OUTCOME TYPE

Clinical Outcome

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

Internal time comparison
Prescriptive standard

PRESCRIPTIVE STANDARD

Goal: greater than 40%

EVIDENCE FOR PRESCRIPTIVE STANDARD

HDC topics: diabetes. [internet]. Rockville (MD): Health Disparities Collaboratives; 2006 Jun 29[10 p.].

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Patients with BP less than 130/80.

MEASURE COLLECTION

[HRSA Health Disparities Collaboratives Measures](#)

MEASURE SET NAME

[HRSA HDC Diabetes Collaborative Measures](#)

SUBMITTER

Health Resources and Services Administration

DEVELOPER

HRSA Health Disparities Collaboratives: Diabetes Collaborative

FUNDING SOURCE(S)

Unspecified

COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

Unspecified

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

Unspecified

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2002 Jan

REVISION DATE

2006 Jun

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

HDC topics: diabetes. [internet]. Rockville (MD): Health Disparities Collaboratives; 2006 Jun 29[10 p.].

MEASURE AVAILABILITY

The individual measure, "Patients with BP Less Than 130/80," is available from the [Health Disparities Collaboratives Web site](#).

COMPANION DOCUMENTS

The following is available:

- Institute for Healthcare Improvement. Health Disparities Collaboratives changing practice, changing lives: diabetes training manual. Cambridge (MA): Institute for Healthcare Improvement; 2002. 74 p. This document is available in Portable Document Format (PDF) from the [Health Disparities Collaboratives Web site](#). See the related [QualityTools](#) summary.

NQMC STATUS

This NQMC summary was completed by ECRI December 19, 2006. The information was verified by the measure developer on February 9, 2007.

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